Meade® 8" LX10 Schmidt-Cassegrain Telescope

All the optical performance of the Meade 8" LX200GPS Schmidt-Cassegrain, at a moderate price.

For the serious amateur astronomer on a more limited budget, or for the more casual observer who nonetheless demands the very finest in optical performance, the Meade 8" LX10 satisfies every requirement. No other similarly-priced 8" Schmidt-Cassegrain offers such a range of high-performance standard features — or such a range of important options for special applications. Consider these standard-equipment 8" LX10 specifications:

Meade 8" Schmidt-Cassegrain Optical System: Notwithstanding its moderate pricing level, the LX10 includes the *exact same* 8" optical system as provided with the more expensive Meade 8" LX200GPS. Every statement in this catalog pertaining to 8" LX200GPS optical performance applies equally as well to the 8" LX10.

Control panel, hand controller, and battery compartment of the Meade 8" LX10.

Fork Mounting: The relatively light weight, but very stable, LX10 fork mounting provides all of the rigidity required for sensitive high-power applications of the telescope, or for photographic or CCD imaging. Ball bearings on the polar axis complement the precise action of the internal worm gear system *(below)*.

DC Electronic Worm-Gear Drive System: The LX10's Meade-engineered drive system incorporates a 5.75"-diameter worm gear, producing smooth, regular sidereal motion for fully automatic tracking of the telescope with low periodic error—a periodic error that permits such advanced capabilities as long-exposure astrophotography or CCD imaging. Drive operation is by means of an electronically-regulated DC servo motor control, powered by four AA-size batteries that fit conveniently through the telescope's control panel. Battery life is about 50 hours of telescope operation.

Hand Controller: Essential for micro-guiding the telescope during long exposure astrophotography, the LX10's standard-equipment pushbutton hand controller yields precise corrections in Right Ascension at 2x speed. With the optional electric Declination motor *(below)* added to the telescope, the hand controller becomes fully functional at 2x speeds on both telescope axes. Both the hand controller and the optional electric Declination motor connect directly to the telescope's control panel.

LX10 Field Tripod: The fixed-height LX10 Field Tripod permits a rigid, stable observing platform for the telescope, even at high magnifications. The 32" tripod height is convenient for standing observations; the tripod accepts attachment of the LX10's equatorial wedge by means of one thread-on knob. For field use the tripod collapses for easy transport.

Ultra-High Transmission Coatings (UHTC) Group: Available optionally on LX10 telescopes, the Meade Ultra-High Transmission Coatings group permits an increase in total light transmission to the telescope focus, averaged over the entire visible spectrum, of about 20%. LX10 telescopes equipped with the UHTC thereby yield dramatically enhanced image brightness on the Moon, planets, and deep-space objects. See pp. 26 - 27 for full details on this important optional feature.

Optional Features

LX10 Electric Declination Motor: During long-exposure astrophotography the observer must correct for minor changes in telescope position, in order that the telescope remains precisely pointed at the object being photographed. The standard-equipment LX10 hand controller permits these corrections in Right Ascension; for corrections in Declination the optional LX10 Electric Declination Motor is required and includes a reduction gear system that results in 2x Declination slow-motion speed. The Electric Declination Motor attaches to the telescope in a few minutes and may remain permanently affixed thereafter.

Magellan I Telescope Computer System: Attached to the 8" LX10 telescope, the Magellan I Telescope Computer permits the quick (10- to 15-second) location of any object in the sky from its catalogued coordinates, or call up any of more than 12,000 sky objects in Magellan's database. Specify Model #2014 Magellan I for the 8" LX10.

Optional Accessories: The full range of Meade Schmidt-Cassegrain accessories, including optional eyepieces, Barlow lenses, camera adapters, filters, off-axis guider, and much more, is available for the LX10. *See pp. 62 - 63 for details.*

Meade 8" LX10
Schmidt-Cassegrain Telescope, shown with standard-equipment Super Plössl 26mm eyepiece, equatorial wedge, hand controller, and LX10 Field Tripod.

"My LX10 arrived last week. What can I say? It's everything you said it would be. The telescope is rock steady and performed perfectly on its first night's observing. Set-up time was about five minutes and my first views of the Orion Nebula were just stunning. Contrast compared to my old Newtonian was excellent and star points were clean and sharp to the edge of the field.... I just don't see how it could have been done better." **— Lee Palmer, Kent, England.**

Specifications and Features: Meade 8" LX10

Optical Design	Schmidt-Cassegrain
Clear Aperture	203mm (8")
Primary Mirror Diameter	209.6mm (8.25")
Focal Length	2000mm
Focal Ratio	f/10
Near Focus *(approx.)*	25 ft.
Resolving Power (arc secs.)	0.56
Optical Coatings	MgF_2; standard aluminum
Ultra-High Trans. Coatings (p. 26)	optional at time of purchase
Limiting Visual Magnitude	14.0 (approx.)
Limiting Photographic Magnitude	16.5 (approx.)
Image Scale (degs./inch)	0.72
Maximum Practical Visual Power	600X
35mm Angular Film Coverage	0.68° x 0.97°
Optical Tube Dimensions	9.1" dia. x 16.75" long
Secondary Mirror Obstruction	3.0"—14.1%
Telescope Mounting	fork type; double tine
Setting Circle Diameters	Dec.: 4"; RA: 8"
RA Motor Drive System	sidereal-rate, DC servo motor
Reduction Gear	5.75"-dia. LX worm gear
Input Power	6.0v DC (by batteries) or 12v DC (by automobile cigarette lighter plug)
Batteries *(user-supplied)*	4 x AA-size *or* 1 x 9v.
Battery Life *(approx.)*	50 hrs.
Hemispheres of Operation	North and South, switchable
Declination Control System	manual tangent arm
Slow-Motion Controls	manual, RA and Dec
Bearings	Dec: Nylon; RA: 2 ball bearings
Hand Controller	2x sidereal-rate speed in RA *(standard)*; 2x Dec. speed *(optional)*
Materials: Tube Body	aluminum
Mount Castings	aluminum
Mirrors	Pyrex® glass
Correcting Plate/Lens	clear float glass
Telescope Dimensions	9.25" x 14" x 23"
Total Net Telescope Weight	49 lbs. (incl. LX10 Field Tripod)
Total Shipping Weight	74 lbs. (incl. LX10 Field Tripod)
Equatorial Wedge Latitude Range	15° - 64°
Field Tripod Height	32"

Specifications: 8" Model LX10—Includes 8" Schmidt-Cassegrain optical tube assembly (D = 203mm; F = 2000mm, f/10) with MgF_2 coatings on the correcting lens and standard aluminum coatings on the primary and secondary mirrors (Ultra-High Transmission Coatings, p. 26, available optionally); fork mount with setting circles, manual slow-motion controls, and locks on both axes; 5.75" LX worm gear reduction system; sidereal-rate electronically-regulated DC servo motor drive; 4-pushbutton hand controller for 2x speed corrections in RA; battery compartment accepting four (user-supplied) AA-size batteries (telescope may also be powered from an automobile cigarette lighter plug, using optional #607 Power Cord); 6 x 30mm viewfinder; eyepiece-holder and diagonal prism (1.25"); Series 4000 Super Plössl 26mm eyepiece; standard equatorial wedge with elevation scale and fine elevation control; LX10 field tripod; operating instructions.

Specifications: 8" Model LX10 Deluxe — Identical in all specifications to 8" Model LX10, above, but with Electric Declination Motor provided as standard equipment, permitting dual-axis corrections at 2x speed; Meade #544 8 x 50mm achromatic viewfinder in place of 6 x 30mm viewfinder; and with Meade AstroFinder Sky Software with 10,000-object database.